

ARGUMENTS AND EXPLANATION

Claims 1 and 15 have been cancelled in response to the examiner's rejection. No reasonable argument for reconsideration can be made.

With respect to rejection of claims 1, 2, and 4-6 based on 35 USC 112, in an informal interview with the examiner, it was agreed that the basis for the rejection could be overcome by stressing the key feature of the invention - delivery of an electric shock concurrently by two different wave lengths of electricity and otherwise by amending claims so that limits were consistent among claims. Claim 2 was fully revised to demonstrate compliance with the preceding considerations. To minimize risks that deficiencies of claim 2 were not imbedded in an amended claim, this claim has been rewritten as new claim 16. Similarly, claim 6 was amended to depend from new claim 16. In view of the scope and limitations of claim 16 and of claim 6, and in consideration of the rejections of claims 2, and 4-6 on the basis of 35 USC 103(A), claims 4 and 5 are cancelled. The following argument and explanation regarding reconsideration of claims 2 and 6 has been transmitted to the examiner following the third telephone interview.

The following discussion provides conclusive grounds to reconsider and withdraw the rejection of claim 2 (or as now presented to allow claim 16) on the basis that the art cited for the 103(A) rejection did not establish the *prima facie* case and that the concurrent delivery of an electrical shock in two different frequencies distinguishes the application from prior art and that the cited prior art did not anticipate this critical limitation. The full argument follows:

Consider the following argument as justification for allowing the revised claim 2, now presented as claim 16.

With respect to the rejection of claim 2 under 35 USC 103(A), please consider the following. Rejection must be based on the establishment of a prima facie case of obviousness. This requires satisfaction of each of three specific elements: (i) where references are combined, a clear basis for combining the references must be obvious; (ii) combining the references must result in an expectation of success; it must be obvious to try the modification or combination suggested by combining the references; and (iii) the prior art reference (or references when combined) must teach or suggest all of the claim limitations.

The distinguishing limitation of claim 2 (now claim 16) is the capability of the electric circuit to produce a first wave carrier frequency (or wave length) of 250 to 500 kHz and a second frequency (or wave length) of 15 to 50 Hz. This limitation is reiterated in the claim by the further requirement that the shock must be "transmitted concurrently

by said first carrier frequency and by said second frequency."

Rejection of claim 2 is based on US patent 5,689,815 by Ranger issued December 16, 1997 in view of US patent 5,750,918 by Mangolds et al issued May 12, 1998.

The first two of the 11 claims of the '815 patent are directed to the shock system. The other are directed to the projectile and the electrodes. Neither of the first two claims per se suggests use of any specific electrical frequency, let alone the use of two frequency. The specification is silent regarding the role of frequency (or wave length) of the delivered shocking current.

The BACKGROUND of the '815 patent (column 2, lines 39-46) introduces "pulsing" as an important factor. Pulsing is an entirely different characteristic of an electrical current compared to the frequency (or wave length) of the current. The SUMMARY OF APPLICANT EXPERIMENTS (column 3, line 53 through column 5, line 49) summarizes the aspect of current anticipated by the '815 patent. Attention is directed to shock strength as a function of voltage with the effects of pulsing as an independent factor. Frequency (or wavelength) of the shocking is not suggested, let alone specifically considered.

Descriptions of the various embodiments continue the emphasis of voltage and pulsing while ignoring electrical frequency (or wave length). The essential electronics are described as "able to provide a incapacitating electric current." No characterization of that current involving wave length, let alone variable wave lengths, is made. The discussion of one possible circuit described in Figure 5 of the '815 patent (column 8, line 24 continuing to column 9, line 33) describes in detail a best mode for a circuit. The capability to produce a current at two frequencies is not addressed, and the circuit as described is not capable of producing such a current. Discussions of alternate circuits related to Figures 6 to 8B and Figure 9 and of electrodes (Figure 10) treat power delivery but do not specify, or remotely suggest delivery or current in more than a single frequency (or wave length). In no case is a specific frequency cited.

Finally, the SUMMARY, RAMIFICATIONS, and SCOPE (column 14 line 9 through 67) of the '815 patent is silent as to wave length (frequency) and reiterates aspects of the projectile and circuit with respect to voltage, with no mention or inference as to wave length.

Because it is silent with regard to wave length (frequency) and because delivery of the disabling charge in two different wave lengths is a specific limitation of claim 2 (now claim 16), US

patent No. 5,698,815 fails to establish a prima facie case of obviousness in regards to claim 2 (now claim 16).

The '918 patent describes and claims a "ballistically deployed restraining net system" wherein the net may be capable of delivering a disabling charge to an individual ensnared by the net. Of the 24 claims, only claim 1 is directed to the electrical shocking means. No claim or reference to a shock delivered in two frequencies, or even in a specified single frequency (or wave length) is made.

The STING NET DESIGN (column 9, line 15 through column 10, line 36) of the '918 patent provides a full characterization of the shocking system. The detailed presentation considers voltage factors and pulsing, but is silent regarding wave length (or frequency) of the current delivered. The specification and figures are otherwise silent on aspects of the electrical circuit, including current wave length (or frequency) of current delivered.

Because the '918 patent is silent on wave length (frequency) as a consideration in delivery of a disabling shock, and because delivery of two different wave lengths (frequencies) is a specific limitation of claim 2 (now claim 16), US patent No. 5,750,918 fails to establish a prima facie case for obviousness. Moreover, the '918 patent delivers a disabling shock by means of an electrically energized net, not a projectile. No skin penetrating probes or electrodes are required or employed. As a result, the energy requirements (voltage) for this system is much greater than that of the penetrating probe system of the '815 patent due mainly to differences in conductivity of the skin's surface versus subdural layers.

Given these significant differences, there is little if any justification in combining the references, and considering the silence of both the '815 and '918 patents on the matter of wave length as a limitation, there is no justification for combining. Any rejection based on combining should fail as a result of this failure to establish a prima facie case for obviousness.


The examiner cited one typographical error in the specification and recommended that the entire specification be critically reviewed to identify and correct similar mistakes. This has been done and is reflected in the amendments to the specification.

CONCLUSIONS AND REQUESTS

Applicant has previously withdrawn claims 3 and 7 through 14. In response applicant has cancelled 1,2,4,5, and 15. Claim 6 has been amended in response to the examiner's rejection and subsequent suggestions and now depends from claim 16. A new claim, claim 16 is present. This claim fully addresses and satisfies the rejection of claim 2 based on both 35 USC 112 and on 35 USC 103(A).

Claims now are in proper condition to be allowed and the application is in condition to issue. The applicant through his undersigned attorney so requests.

Respectfully,

A handwritten signature in cursive script, appearing to read "Stephen R. Chapman", is written over the typed name.

Stephen R. Chapman
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